

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Previously Presented) A WDM optical communication system, said system comprising:
input means and output means for an optical signal, an optical fibre path connecting signal-transmissively said input and output means, wherein the optic signal is amplified by means of Raman amplification and said optical fibre path comprises at least one Raman amplifier, further comprising WDM means for coupling at least two polarized pump radiation wavelengths with wavelengths less than the signal radiation wavelength into said Raman amplifier, wherein the polarization of one of the pump radiation wavelengths is maintained at a predetermined difference in polarization with respect to the polarization of the other pump radiation wavelengths,

wherein,

the polarization of the pump radiations of the lower part of the pump wavelength band is orthogonal with respect to that of the upper part.

2. (Currently Amended) An Amplifier according to claim 1, characterized in that the Raman amplification is a distributed Raman amplification.

3. (Currently Amended) Amplifier according to claim 1, characterized in that the Raman amplification is a localised Raman amplification.

4. (Canceled)

5. (Canceled)

6. (Currently Amended) An Amplifier according to claim 1, characterized in that the amplification is in the C- or L-Band and the lower part of the wavelength band comprises wavelengths 1427, 1439, and 1450 nm and the upper part comprises a wavelength of 1485 nm.

7. (New) A WDM optical communication system, said system comprising an optical signal input, an optical signal output, an optical fiber path having at least one Raman amplifier and connecting said input and output, said Raman amplifier receiving a plurality of pump signals whereby an optical signal at said input is amplified by means of Raman amplification during passage through said optical fiber path, wherein said pump signals include a first pump signal having a first pump wavelength in a first part of a pump wavelength band, a second pump signal having a pump wavelength in a continuous second part of said pump wavelength band, and a third pump signal having a third pump wavelength in said second part of said pump wavelength band, wherein the polarization of said first pump signal is different from the polarizations of said second and third pump signals and bears the same predetermined relationship to the polarizations of each of said second and third pump signals.

8. (New) An amplifier according to claim 7, wherein said first pump signal is orthogonally polarized with respect to said second and third pump signals.

9. (New) An amplifier according to claim 7, wherein said first part is an upper part of said pump wavelength band and said second part is a lower part of said pump wavelength band.

10. (New) An amplifier according to claim 8, wherein said first part is an upper part of said pump wavelength band and said second part is a lower part of said pump wavelength band.

11. (New) An amplifier according to claim 7, wherein the Raman amplification is a distributed Raman amplification.

12. (New) An amplifier according to claim 7, wherein the Raman amplification is a localised Raman amplification.

13. (New) An amplifier according to claim 9, characterized in that the amplification is in the C- or L-Band and the lower part of the wavelength band comprises wavelengths 1427, 1439, and 1450 nm and the upper part comprises a wavelength of 1485 nm.